

#### **ABSTRACT OF THE DISCLOSURE**

The present invention relates to method to effectively implement motion estimation, which is a part of digital video signal processing algorithm, in mobile device like embedded system with small internal memory space. In the present invention, with recognition to the overlapped block of the reference search area between the current and its next macro block, only non-overlapped blocks are transferred to internal memory when motion estimation of next macro block is performed. So the access of external memory and power consumption is reduced and the usability of internal memory is increased. Then, the system performance to implement complex algorithm of MPEG-4 video encoder in mobile devices is improved.